

README

This document lists the scripts needed to replicate all results in the paper.

Note: All MATLAB scripts were run on MATLAB 2023a. All Stata scripts were run on Stata 18.

Lab Experiment

Table 2:

- Column 3:
 - o Run *experiment/script_estimation.m* to obtain the coefficient on negative discount relative to the coefficient on price (saved as *ratio_trimmed_mean*)
 - o Run *experiment /script_bootstrap.m* to obtain the standard error for the estimate of the coefficient on negative discount relative to the coefficient on price (calculated as the standard deviation of the vector *ratio_trimmed_mean_bs*).
- Run *experiment /data_anaysis.do* to get other entries in the table. This requires running the MATLAB codes in the previous two bullet points first.

Figure S.2:

- Run *experiment /boundtest.do* to get the lower bounds and upper bounds
- Run *experiment/script_overid_test.m* (requires running *experiment/script_estimation.m* first)

Table S.7 (first panel):

- Run *experiment/robustzvar.do*

Expedia application

Table 3, Figure S.5, Table S.6, Table S.4 columns 2&3

- Run *Expedia/dataclean.do*

Figure 3, Table S.4 columns 4&5, Table S.5, Table S.8

- Run *Expedia/flexible_logit_location/estimate_bootstrap.do* to get the bootstrap estimates.
- Run *Expedia/flexible_logit_location/estimate_point.do* to get the point estimate and confidence intervals for beta and for the difference in the absolute values of the betas estimated via flexible and standard logit.
- Repeat the same procedure for the alternative model specifications listed in Table 4, in folders *Expedia/flexible_logit_price*, *Expedia/flexible_logit_star*, and *Expedia/flexible_logit_review*.
- Normalize coefficients and confidence intervals by multiplying them by the standard deviation of the corresponding z variable, this will generate the estimation results reported in Table S.4, Table S.5, and Table S.8. Results before and after normalization are collected in *Expedia/Results.xlsx*.
- Run *Expedia/CIgraph.do* to make the graphs in Figure 3.

Table 5

- Run *Expedia/flexible_logit_location/welfareanalysis.do*

Figure S.4

- Run *Expedia/flexible_logit_location/boundtest.do* to generate the bounds in Figure S.4.
- Then run *Expedia/flexible_logit_location/bounds_plot.m* to make the plot.

Figure S.3

- Run *Expedia/flexible_logit_correlatedxz/estimate_bootstrap.do* to get the bootstrap estimates.
- Run *Expedia/flexible_logit_correlatedxz/estimate_point.do* to get the point estimate and confidence interval for difference in the absolute values of the betas estimated via flexible and standard logit.
- Repeat the same procedure for the alternative model specifications listed in Figure S.3, in folders *Expedia/flexible_logit_epsiloninthebox*, *Expedia/flexible_logit_219*, *Expedia/flexible_logit_other*, *Expedia/flexible_logit_setR*.
- Normalize coefficients and confidence intervals by multiplying them with the standard deviation of location score, except for the 'epsilon in the box' model. For the 'epsilon in the box' model, normalize by multiplying them with the ratio: $\text{std}(\text{location})/\text{std}(\text{price})$. Results before and after normalization are collected in *Expedia/Results.xlsx*.
- Run *Expedia/CIgraph.do* to make the plot.

Table S.7 (second panel)

- Run *Expedia/flexible_logit_location/robustzvar.do*

Figure S.6

- Run *Expedia/flexible_logit_robustzvarrest/robustzvarrest.do*

Bernstein Simulations

Table S.1:

- Two goods, continuous z:
 - o Run *bernstein_simulations/J2/codes/continuous_z/script_weitzman.m* for DGP 1
 - o Run *bernstein_simulations/J2/codes/continuous_z/script_satis.m* for DGP 2
 - o Run *bernstein_simulations/J2/codes/continuous_z/script_simult.m* for DGP 3
 - o Run *bernstein_simulations/J2/codes/continuous_z/script_random.m* for DGP 4
 - o For each DGP, the table reports the mean and standard deviation of *ratio_of_trimmed_means_second* (for ratios of second derivatives) and of *ratio_of_trimmed_means_first* (for ratios of first derivatives)
- Two goods, discrete z:
 - o Run *bernstein_simulations/J2/codes/discrete_z/weitzman/script_1-250.m* for DGP 1
 - o Run *bernstein_simulations/J2/codes/discrete_z/satis/script_1-250.m* for DGP 2
 - o Run *bernstein_simulations/J2/codes/discrete_z/simult/script_1-250.m* for DGP 3
 - o Run *bernstein_simulations/J2/codes/discrete_z/random/script_1-250.m* for DGP 4
 - o For each DGP, combine the results using *bernstein_simulations/J2/codes/discrete_z/script_combine.m*
 - o The table reports the mean and standard deviation of *ratio_of_trimmed_mean_all* (for ratios of second derivatives) and of *ratio_of_trimmed_mean_all_first* (for ratios of first derivatives)
- Three goods, continuous z:
 - o Run *bernstein_simulations/J3/codes/weitzman/script_1-250.m* for DGP 1
 - o Run *bernstein_simulations/J3/codes/satis/script_1-250.m* for DGP 2
 - o Run *bernstein_simulations/J3/codes/simult/script_1-250.m* for DGP 3
 - o Run *bernstein_simulations/J3/codes/random/script_1-250.m* for DGP 4
 - o For each DGP, combine the results using *bernstein_simulations/J3/codes/script_combine.m*
 - o The table reports the mean and standard deviation of *ratio_of_trimmed_mean_all_second* (for ratios of second derivatives) and of *ratio_of_trimmed_mean_all_first* (for ratios of first derivatives)

Flexible Logit Simulations

Table S.2:

- Run *FlexibleLogit_Simulations/Simulations_main/makesimulationresults.do*

Figure S.1:

- Run *FlexibleLogit_Simulations/Simulations_outsideoption/makesimulationresults.do*